ABSTRACT OF THE DISCLOSURE

Outputs from respective elements of an array antenna 21 are demodulated, and the demodulated outputs are stored in storage means 29. The demodulated outputs are multiplied by tap coefficients of adaptive array antenna, then the multiplied outputs are combined by combining means 28, and the combined output is provided via a feed forward filter 22 to an adaptive equalizer 23, wherein it is equalized to obtain a decision symbol. During reception of a training signal the tap coefficients of adaptive array antenna and tap coefficients of the adaptive equalizer 23 are subjected to convergence processing by tap coefficient calculating means 24 so that an error signal becomes small, and then tap coefficients of the feed forward filter 22 and the adaptive equalizer 23 are subjected to convergence processing by tap coefficient calculating means 25 so that an error signal becomes small. Thereafter, the convergence processing by the means 24 and 25 is repeated, during which a training signal stored in storage means 29 is used, results of the immediately preceding convergence processing are used as initial values, and it is decided by receiving quality estimating means 26 whether the error signal has become sufficiently small relative to the received signal power.